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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,583	01/18/2005	Jochen Eisl	449122078400	2776

29177 7590 11/21/2007  
BELL, BOYD & LLOYD, LLP  
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CHICAGO, IL 60690

EXAMINER
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TAHA, SHAQ

ART UNIT	PAPER NUMBER
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2146

MAIL DATE	DELIVERY MODE
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11/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/521,583	<b>Applicant(s)</b> EISL ET AL.	
	<b>Examiner</b> Shaq Taha	<b>Art Unit</b> 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/19/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### **Response to Arguments**

Applicant's arguments with respect to claims 1 - 8 have been considered but are moot in view of the new ground(s) of rejection.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 - 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiller et al. (US 6,445,922), and further in view of Forslow et al. (US 6,973,057).

Regarding claim 1, Hiller et al teaches a method for transfer of an IP packet over a path from a sender over a radio access network to a mobile host, **[A method and system are disclosed for supporting overlapping IP addresses by sharing a mobile node identifier between an IWF and a Foreign Agent in a visited data (e.g., wireless) network, (See Abstract)];**

comprising: examining, when a home agent receives an incoming data packet determined for a mobile host with a destination address, **[For data packets moving in the reverse Mobile IP traffic direction (from the mobile node), the Foreign Agent uses the mobile node identifier to identify the correct Home Agent destination by finding the corresponding Home Agent address in the Visitor List table, (See Abstract)];**

if there is a match between the destination address of the packet and a sub network address of a foreign agent listed in a list of sub network addresses, **[For forward Mobile IP traffic (to the mobile node), the IWF uses the mobile node identifier to identify the correct mobile node destination by finding the corresponding link identifier in the Mobile Identity table, (See Abstract)];**

stored at the home agent (HA), **[sharing step includes storing said mobile node identifier, along with a mobile node home (IP) address and a Home Agent IP address associated with a mobile node identified by said mobile node identifier, (Column 9, lines 19 – 23)];**

and examining, if there is a match between the destination address and a sub network address of a foreign agent, whether a preconfigured path from the home agent to the

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foreign agent exists, **[The IWF 8 verifies that the mobile node 4's IP address in the registration request message matches the address in the Mobile Identity table 18 and then routes the registration request and NAI to the Foreign Agent 10, (Column 6, lines 26 – 29);**

Hiller et al. differs from the claimed invention is that a preconfigured label switched path is not taught in Nwabueze et al.

Forslow et al. teaches a public mobile access data network provides a mobile node data access to the Internet and data access to the mobile node from the Internet even when a point of attachment of the mobile node to the public mobile access data networks changes, **(Abstract)**.

Forslow et al. further teaches a The mobile IP packets are carried using multi-protocol label path switching (MPLS)label switched paths (LSPs) which provide a number of benefits such as tunneling flexibility, configurability, and efficiency, **(Abstract)**.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hiller by including determining a preconfigured label switched path as taught by Forslow.

One of ordinary skill in the art would have been motivated to make this modification in order to provide the advantage of a preconfigured label switched path.

Regarding claim 2, Hiller et al teaches the method according to claim 1, wherein the home agent sends the packet to the foreign agent on the preconfigured label switched

path, **[Once the mobile node's Home Agent is determined, the Foreign Agent sends the data packet to that Home Agent, (Column 2, lines 48 – 51)].**

by sending the packet over a port of a forwarding interface of the home agent which port is used for the path with the path number, **[While communicating with other network nodes, the mobile node communicates across an air interface to a base station, and typically sends and receives data packets over a Point-to-Point Protocol (PPP) link that connects the mobile node to a centralized network element known as an Inter working Function (IWF) that hides cellular specific aspects from the general IP network, (Column 1, lines 30 – 36)].**

Regarding claim 3, Hiller et al teaches the method wherein the home agent examines if there is a match between the destination address of the packet and a sub network address of a foreign agent if there is an entry in a binding cache of the home agent which entry corresponds to the destination address of the incoming packet, **[This invention relates to the routing of data packets to and from a mobile node in a visited wireless data network when the mobile node's home address matches the home address of another mobile node in the same visited network, (Column 1, lines 17 – 20)].**

Regarding claim 4, Hiller et al teaches the method wherein a handover of a mobile host from one foreign agent to an other foreign agent is done without creating or modifying a path between the foreign agent and a home agent of the mobile host, **[The Foreign**

**Agent and a Home Agent (a router located in the mobile node's home network) exchange data packets between each other via a tunnel, (Column 1, lines 42 – 45)].**

Regarding claim 5, Hiller et al teaches the method wherein the preconfigured label switched path is preconfigured, statically administered, and multipurpose label switched path, **[For forward Mobile IP traffic (to the mobile node), the IWF uses the mobile node identifier to identify the correct mobile node destination by finding the corresponding link identifier in the Mobile Identity table, (See Abstract)].**

Regarding claim 6, Hiller et al teaches the method wherein the functional entities of mobile IP and multipurpose label switching are co-located but not correlated in a foreign agent, **[The Foreign Agent is unable to ascertain the difference between the two mobile nodes because it relies on the mobile node's home address to determine the Home Agent to which the data packets should be sent -or tunneled. When the two mobile nodes have the same home address, the Foreign Agent cannot perform its normal reverse direction routing functions, (Column 2, lines 6 – 12)].**

Regarding claim 7, Hiller et al teaches the method wherein a foreign agent and a home agent are packet switched nodes of an IP network, **[The Foreign Agent and a Home Agent (a router located in the mobile node's home network) exchange data packets between each other via a tunnel, (Column 1, lines 42 – 45)].**

### **Conclusion**

The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **PEP 707.05(c)**.

The following are analogous art because they are from the same field of endeavor of Home Agent Optimization for handling Mobile IP and Static MPLS:

- Hiller et al. Patent No: (US 6,445,922)
- Forslow et al. Patent No: (US 6,973,057)
- Borella et al. Patent No: (US 6,697,354)
- Dutnall et al. Patent No: (US 6,584,098)
- Khalil et al. Patent No: (US 6,574,214)
- Johnson et al. Patent No: (US 6,625,135)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shaq Taha** whose telephone number is 571-270-1921. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jeff Put** can be reached on 571-272-6798.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/20/07

S. Taha



JEFFREY PWU  
SUPERVISORY PATENT EXAMINER